Amendments To The Claims:

1. (Currently amended) A method of treating a lesion at a neurovascular target vessel site, comprising

guiding a neuro-interventional catheter to the neurovascular target vessel site,

advancing through the catheter, a stent adapted for advancement through a catheter in an upstream to downstream direction to the target site in a contracted stent condition, and with expulsion from the catheter, downstream end first, and radial expansion at the target site, to engage the walls of the vessel,

said stent being formed of a coiled ribbon, wherein the entirety of the stent forms a single conduit, the stent having a length, having a downstream end and an upstream end, having a non-zero pitch along its length, being self-expanding and having a bending-stiffness gradient along its length due to one or more of the ~~following~~:

(i) a gradient ~~of~~ ribbon width;

(ii) a gradient of ribbon thickness;

(iii) a gradient of size or number of openings formed in the stent ribbon, and

expelling the stent from the catheter at the target site, causing the stent to expand radially against the vessel walls at the target site,

wherein said guiding includes engaging a pusher wire with the stent, pushing the stent through the catheter with the pusher wire, and expelling the stent from the catheter at the target site, with stent radial expansion at the target site being effective to release the stent from the pusher wire.

2. (Previously presented) The method of claim 1, wherein the pusher wire engages the downstream end of the stent.

3. (Previously presented) The method of claim 2, wherein the stent is releasably attached to the pusher wire, for release therefrom, when the stent is released and extends to its expanded condition.

4. (Previously presented) The method of claim 1, wherein the stent has a contracted-condition diameter of between about 10 and 30 mils, and a diameter in a fully expanded condition of between 40 and 125 mils.

5. (Previously presented) The method of claim 1, wherein the stiffness gradient in the stent is

due to a gradient of ribbon width, lesser ribbon width at the upstream end of the stent, and greater ribbon width at the downstream end of the stent, where the greater ribbon width is (i) at least ten times the ribbon thickness and (ii) at least two times the lesser width,

said greater ribbon width being effective to reduce the rate of expansion of the stent from its contracted to its radially extended condition, relative to that of a stent having uniform winding widths equal to the lesser ribbon widths,

said lesser ribbon width being effective to increase the angle of catheter bend through which the catheter can be advanced, in an upstream to downstream direction, relative to that of a stent having uniform winding widths equal to the greater ribbon width.

6. (Original) The method of claim 5, wherein the stent ribbon thickness is between is 0.5 and 2 mils, the greater ribbon width is between 25 and 75 mils, and the lesser ribbon width is between 5 and 15 mils.

7. (Previously presented) The method of claim 1, wherein the stent openings are I-beam shaped openings whose "I" axis is aligned transversely to the longitudinal axis of the stent in the contracted state, or Z-shaped openings whose central axis is aligned transversely to the longitudinal axis of the stent in the contracted state.

8. (Previously presented) The method of claim 1, wherein the ribbon in helical form is effective to cover between 50% and 80% of the surface area of the vessel region containing the stent.

9. (Previously presented) The method of claim 1, wherein the ribbon, when stretched out, is straight.

10. (Previously presented) The method of claim 2, wherein the pusher wire has an expanded portion which engages the stent.

11. (Previously presented) The method of claim 2, wherein the downstream end of the stent is connected to a notch on the end of the pusher wire.

12. (Previously presented) The method of claim 1, wherein the stent does not deploy until it is free from the catheter.

13. (Previously presented) The method of claim 1, wherein the neurovascular target vessel site is a neurovascular aneurysm.

14. (Currently amended) A method of treating a lesion at a neurovascular target vessel site,

comprising

guiding a neuro-interventional catheter to the target site,

advancing through the catheter, a stent adapted for advancement through a catheter in an upstream to downstream direction to the target site in a contracted stent condition, and with expulsion from the catheter, downstream end first, and radial expansion at the target site, to engage the walls of the vessel,

said stent being formed of a coiled ribbon shaped to form a single conduit, having a length, having a non-zero pitch along its length, having a downstream end and an upstream end, being self-expanding and having a bending-stiffness gradient along its length due to one or more of the following:

(i) a gradient of ribbon width, greater ribbon width at the upstream end of the stent, and lesser ribbon width at the downstream end of the stent, wherein the ribbon width progressively decreases from the upstream end in a downstream direction along the length of the stent, such that the width of the ribbon at any point is greater or equal to the width of the ribbon at any other point which is downstream; and

(ii) ~~a gradient of ribbon thickness;~~

~~(iii)~~ a gradient of size or number of openings per unit length formed in the stent ribbon, wherein the size or number of openings progressively increases from the upstream end in a downstream direction along the length of the ribbon, and

expelling the stent from the catheter at the target site, causing the stent to expand radially against the vessel walls at the target site,

wherein said guiding includes engaging a pusher wire with the stent, pushing the stent through the catheter with the pusher wire, and expelling the stent from the catheter at the target site, with stent radial expansion at the target site being effective to release the stent from the pusher wire and wherein the ribbon, when stretched out, is straight.

Please add the following claims:

15. (New) The method of claim 1, the bending-stiffness gradient along the stent's length being due to one or more of the following:

(i) a gradient of ribbon width, greater ribbon width at the upstream end of the

stent, and lesser ribbon width at the downstream end of the stent, wherein the ribbon width progressively decreases from the upstream end in a downstream direction along the length of the stent, such that the width of the ribbon at any point is greater or equal to the width of the ribbon at any other point which is downstream; and

(ii) a gradient of size or number of openings per unit length formed in the ribbon, wherein the size or number of openings progressively increases from the upstream end in a downstream direction along the length of the ribbon.

16. (New) The method of claim 15, the ribbon having a gradient of ribbon width.

17. (New) The method of claim 15, the ribbon having a gradient of size or number of openings per unit length.